

What is Claimed is:

1. A signal distribution system comprising a transmission means of respectively allocating different frequencies to a plurality of signals and of transmitting said signals by utilizing the allocated frequencies and

communication paths for transmitting said plurality of signals to be transmitted and

a plurality of reception means of receiving signals to which the corresponding frequencies are allocated based on predetermined corresponding relationships from among said transmitted plurality of signals characterized in that

wherein said corresponding relationships are corresponding relationships between each of said frequencies and each of said reception means that have been predetermined based on substantial distances between said transmission means and each of said reception means along said communication paths.

2. A signal distribution system according to Claim 1, characterized in that

said corresponding relationships are relationships wherein the smaller the substantial distance of a reception means is the higher the frequency which corresponds to the reception means and

said plurality of reception means respectively have a plurality of terminals and

said communication paths are coaxial cables.

3. A signal distribution system according to Claim 2, characterized in that contents of said signals are determined based on requests from said terminals and the determined signals are transmitted on said communication paths by using the frequencies corresponding to the reception means with the terminals that have sent said requirements.

4. A signal distribution system according to Claim 3, characterized in that

    said signals are quadrature amplitude modulation signals;  
    said reception means further have region distribution boxes, respectively, which are connected in the order from said transmission means;

    said terminals are seat electronics boxes provided in airplanes and

    said transmission means is a quadrature amplitude modulation unit which can frequency multiplex said plurality of quadrature amplitude modulation signals.

5. A signal distribution system according to Claim 4, characterized in that said quadrature amplitude modulation unit selects a quadrature modulation system having a multi value number for said signal received by a region distribution box, wherein the smaller the substantial distance between said transmission means and said reception means along said communication path is the higher said multi value number is, and transmission of said signal is carried out by utilizing the

selected modulation system.

6. A transmission device for respectively allocating different frequencies to a plurality of signals and for transmitting said plurality of signals to a plurality of reception means of receiving signals, to which the corresponding frequencies are allocated based on predetermined corresponding relationships, via communication paths by utilizing the allocated frequencies,

wherein the transmission device is characterized in that said corresponding relationships are corresponding relationships between each of said frequencies and each of said reception means that have been predetermined based on substantial distances between said transmission device and each of said reception means along said communication paths.

7. A reception device for receiving a signal to which the corresponding frequency is allocated based on a predetermined corresponding relationship from among a plurality of signals transmitted, via a communication path, from a transmission means for respectively allocating different frequencies to said plurality of signals and for transmitting said signals by utilizing the allocated frequencies,

wherein the reception device is characterized in that said corresponding relationship is a corresponding relationship between said frequency and said reception device that has been predetermined based on the substantial distance between said

transmission means and said reception device along said communication path.

8. A signal distribution system characterized by comprising:

a transmission means of selecting modulation systems based on predetermined criteria for a plurality of signals and of transmitting said plurality of signals by utilizing the selected modulation systems;

communication paths for transmitting said plurality of signals to be transmitted; and

a plurality of reception means of receiving the allocated signals from among said transmitted plurality of signals.

9. A signal distribution system according to Claim 8, characterized in that:

said signals are quadrature amplitude modulation signals;

said reception means further have a plurality of seat electronics boxes provided in airplanes and region distribution boxes, respectively, which are connected in the order from said transmission means;

said transmission means is a quadrature amplitude modulation unit which can frequency multiplex said plurality of quadrature amplitude modulation signals and is connected to the region distribution box of which the order is the lowest; and

the selection of modulation systems based on said

predetermined criteria is to select a quadrature modulation system having a multi value number for a signal allocated to a reception means, wherein the lower the order of the reception means is the higher the multi value number is.

10. A signal distribution method comprising the steps of:

allocating respectively different frequencies to a plurality of signals on a transmission side;

transmitting said plurality of signals to be transmitted by utilizing the allocated frequencies via communication paths; and

receiving signals to which the corresponding frequencies are allocated based on predetermined corresponding relationships from among said transmitted plurality of signals on a plurality of reception sides characterized in that

wherein said corresponding relationships are corresponding relationships between each of said frequencies and each of said reception sides that have been predetermined based on substantial distances between said transmission side and each of said reception sides along said communication paths.

11. A transmission method for respectively allocating different frequencies to a plurality of signals on a transmission side and for transmitting said plurality of signals to a plurality of reception sides of receiving signals, to which the corresponding frequencies are allocated based on predetermined

corresponding relationships, via communication paths by utilizing the allocated frequencies,

wherein the transmission method is characterized in that said corresponding relationships are corresponding relationships between each of said frequencies and each of said reception sides that have been predetermined based on substantial distances between said transmission side and each of said reception sides along said communication paths.

12. A reception method for receiving a signal to which the corresponding frequency is allocated based on a predetermined corresponding relationship from among a plurality of signals transmitted, via a communication path, from a transmission side for respectively allocating different frequencies to said plurality of signals and for transmitting said signals by utilizing the allocated frequencies,

wherein the reception method is characterized in that said corresponding relationship is a corresponding relationship between said frequency and a reception side that has been predetermined based on the substantial distance between said transmission side and said reception side along said communication path.

13. A signal distribution method characterized by comprising the steps of:

selecting modulation systems based on predetermined criteria for a plurality of signals on a transmission side;

transmitting said plurality of signals by utilizing the selected modulation systems via communication paths for transmitting said plurality of signals to be transmitted; and receiving the allocated signals from among said transmitted plurality of signals on a plurality of reception sides.

14. A medium for holding a program or data that allow a computer to carry out the functions of the entirety of, or part of the means of the entirety of, or part of the present invention according to any of Claims 1 to 9, wherein the medium is characterized by being able to be processed by a computer.

15. An information assembly characterized by being a program or data that allow a computer to carry out the functions of the entirety of, or part of the means of the entirety of, or part of the present invention according to any of Claims 1 to 9.